SEQUENCE LISTING

<110> Virca, Duke
Bird, Timothy A.
Anderson, Dirk M.
Marken, John S.

<120> Human cDNAs Encoding Polypeptides Having Kinase Functions

<130> 2877-US

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<170> PatentIn Ver. 2.0

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Ala Ala Pro Ala Gly Ser Leu Ser Arg Lys Lys Arg Leu Glu Leu Asp
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Asp Asn Leu Asp Thr Glu Arg Pro Val Gln Lys Arg Ala Arg Ser Gly
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Arg His Arg Ile Pro Glu Pro Glu Ala Ala Val Leu Phe Arg Gln Met
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Ser Leu Trp Asp Lys His Ala Cys Pro Ala Tyr Val Gly Pro Glu Ile
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Asp Ser Glu Pro Val Leu Leu Phe Gly Lys Ile Arg Arg Gly Ala Tyr
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Glu Arg Leu Lys Asp Lys Gly Asn Phe Leu Thr Glu Asp Gln Ile Leu
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Trp Leu Leu Leu Gly Ile Cys Arg Gly Leu Glu Ala Ile His Ala Lys
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Gly Tyr Ala Tyr Arg Asp Leu Lys Pro Thr Asn Ile Leu Leu Gly Asp
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Glu Gly Gln Pro Val Leu Met Asp Leu Gly Ser Met Asn Gln Ala Cys
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Ile His Val Glu Gly Ser Arg Gln Ala Leu Thr Leu Gln Asp Trp Ala
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Gly Gln Val Ile His Lys Arg Cys Glu Glu Met Lys Tyr Cys Lys Lys
    50                  55                  60

Gln Cys Arg Arg Leu Gly His Arg Val Leu Gly Leu Ile Lys Pro Leu
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Glu Met Leu Gln Asp Gln Gly Lys Arg Ser Val Pro Ser Glu Lys Leu
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Thr Thr Ala Met Asn Arg Phe Lys Ala Ala Leu Glu Glu Ala Asn Gly
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Glu Ile Glu Lys Phe Ser Asn Arg Ser Asn Ile Cys Arg Phe Leu Thr
        115                 120                 125

Ala Ser Gln Asp Lys Ile Leu Phe Lys Asp Val Asn Arg Lys Leu Ser
    130                 135                 140

Asp Val Trp Lys Glu Leu Ser Leu Leu Leu Gln Val Glu Gln Arg Met
145                 150                 155                 160

Pro Val Ser Pro Ile Ser Gln Gly Ala Ser Trp Ala Gln Glu Asp Gln
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Gln Asp Ala Asp Glu Asp Arg Arg Ala Phe Gln Met Leu Arg Arg Asp
            180                 185                 190

Asn Glu Lys Ile Glu Ala Ser Leu Arg Arg Leu Glu Ile Asn Met Lys
        195                 200                 205

Glu Ile Lys Glu Thr Leu Arg Gln Tyr Leu Pro Pro Lys Cys Met Gln
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Glu Ile Pro Gln Glu Gln Ile Lys Glu Ile Lys Lys Glu Gln Leu Ser
225                 230                 235                 240

Gly Ser Pro Trp Ile Leu Leu Arg Glu Asn Glu Val Ser Thr Leu Tyr
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Lys Gly Glu Tyr His Arg Ala Pro Val Ala Ile Lys Val Phe Lys Lys
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Leu Gln Ala Gly Ser Ile Ala Ile Val Arg Gln Thr Phe Asn Lys Glu
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Ile Lys Thr Met Lys Lys Phe Glu Ser Pro Asn Ile Leu Arg Ile Phe
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Gly Ile Cys Ile Asp Glu Thr Val Thr Pro Pro Gln Phe Ser Ile Val
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Pro Phe Gln Gly Cys Asn Ser Glu Lys Ile Arg Lys Leu Val Ala Val
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Pro Asn Glu Pro Glu Gly Gly Asp Lys Ser Arg Lys Ser Ala Lys Gly
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Asp Lys Gly Gly Lys Asp Lys Lys Gln Ile Gln Thr Ser Pro Val Pro
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Val Arg Lys Asn Ser Arg Asp Glu Glu Lys Arg Glu Ser Arg Ile Lys
85 90 95

Ser Tyr Ser Pro Tyr Ala Phe Lys Phe Phe Met Glu Gln His Val Glu

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Asn Val Ile Lys Thr Tyr Gln Gln Lys Val Asn Arg Arg Leu Gln Leu
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Glu Gln Glu Met Ala Lys Ala Gly Leu Cys Glu Ala Glu Gln Glu Gln
    130                 135                 140

Met Arg Lys Ile Leu Tyr Gln Lys Glu Ser Asn Tyr Asn Arg Leu Lys
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Arg Ala Lys Met Asp Lys Ser Met Phe Val Lys Ile Lys Thr Leu Gly
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Ile Gly Ala Phe Gly Glu Val Cys Leu Ala Cys Lys Val Asp Thr His
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Ala Leu Tyr Ala Met Lys Thr Leu Arg Lys Lys Asp Val Leu Asn Arg
        195                 200                 205

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Ile Ala Glu Leu Thr Leu Ala Ile Glu Ser Val His Lys Met Gly Phe
        275                 280                 285

Ile His Arg Asp Ile Lys Pro Asp Asn Ile Leu Ile Asp Leu Asp Gly
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His Ile Lys Leu Thr Asp Phe Gly Leu Cys Thr Gly Phe Arg Trp Thr
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His Asn Ser Lys Tyr Tyr Gln Lys Gly Ser His Val Arg Gln Asp Ser
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Met Glu Pro Ser Asp Leu Trp Asp Asp Val Ser Asn Cys Arg Cys Gly
            340                 345                 350

Asp Arg Leu Lys Thr Leu Glu Gln Arg Ala Arg Lys Gln His Gln Arg
        355                 360                 365

Cys Leu Ala His Ser Leu Val Gly Thr Pro Asn Tyr Ile Ala Pro Glu
    370                 375                 380

Val Leu Leu Arg Lys Gly Tyr Thr Gln Leu Cys Asp Trp Trp Ser Val
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Gly Val Ile Leu Phe Glu Met Leu Val Gly Gln Pro Pro Phe Leu Ala
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Pro Thr Pro Thr Glu Thr Gln Leu Lys Val Ile Asn Trp Glu Asn Thr
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Pro Gln Glu Leu Glu Asp Val Phe Tyr Gln Tyr Asp Val Lys Ser Glu
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Ile Tyr Ser Phe Gly Ile Val Leu Trp Glu Ile Ala Thr Gly Asp Ile
     50                  55                  60

Pro Phe Gln Gly Cys Asn Ser Glu Lys Ile Arg Lys Leu Val Ala Val
 65                  70                  75                  80

Lys Arg Gln Gln Glu Pro Leu Gly Glu Asp Cys Pro Ser Glu Leu Arg
                 85                  90                  95

Glu Ile Ile Asp Glu Cys Arg Ala His Asp Pro Ser Val Arg Pro Ser
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Val Asp Glu Ile Leu Lys Lys Leu Ser Thr Phe Ser Lys
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Pro Tyr Pro Lys His Leu Leu Leu Arg Ser Lys Ser Glu Gln Tyr Asp
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Leu Asp Ser Leu Cys Ala Gly Met Glu Gln Ser Leu Arg Ala Gly Pro
35 40 45

Asn Glu Pro Glu Gly Gly Asp Lys Ser Arg Lys Ser Ala Lys Gly Asp
50 55 60

Lys Gly Gly Lys Asp Lys Lys Gln Ile Gln Thr Ser Pro Val Pro Val

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Arg Lys Asn Ser Arg Asp Glu Glu Lys Arg Glu Ser Arg Ile Lys Ser
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Tyr Ser Pro Tyr Ala Phe Lys Phe Phe Met Glu Gln His Val Glu Asn
            100                 105                 110

Val Ile Lys Thr Tyr Gln Gln Lys Val Asn Arg Arg Leu Gln Leu Glu
        115                 120                 125

Gln Glu Met Ala Lys Ala Gly Leu Cys Glu Ala Glu Gln Glu Gln Met
    130                 135                 140

Arg Lys Ile Leu Tyr Gln Lys Glu Ser Asn Tyr Asn Arg Leu Lys Arg
145                 150                 155                 160

Ala Lys Met Asp Lys Ser Met Phe Val Lys Ile Lys Thr Leu Gly Ile
                165                 170                 175

Gly Ala Phe Gly Glu Val Cys Leu Ala Cys Lys Val Asp Thr His Ala
            180                 185                 190

Leu Tyr Ala Met Lys Thr Leu Arg Lys Lys Asp Val Leu Asn Arg Asn
        195                 200                 205

Gln Val Ala His Val Lys Ala Glu Arg Asp Ile Leu Ala Glu Ala Asp
    210                 215                 220

Asn Glu Trp Val Val Lys Leu Tyr Tyr Ser Phe Gln Asp Lys Asp Ser
225                 230                 235                 240

Leu Tyr Phe Val Met Asp Tyr Ile Pro Gly Gly Asp Met Met Ser Leu
                245                 250                 255

Leu Ile Arg Met Glu Val Phe Pro Glu His Leu Ala Arg Phe Tyr Ile
            260                 265                 270

Ala Glu Leu Thr Leu Ala Ile Glu Ser Val His Lys Met Gly Phe Ile
        275                 280                 285

His Arg Asp Ile Lys Pro Asp Asn Ile Leu Ile Asp Leu Asp Gly His
    290                 295                 300

Ile Lys Leu Thr Asp Phe Gly Leu Cys Thr Gly Phe Arg Trp Thr His
305                 310                 315                 320

Asn Ser Lys Tyr Tyr Gln Lys Gly Ser His Val Arg Gln Asp Ser Met
                325                 330                 335

Glu Pro Ser Asp Leu Trp Asp Asp Val Ser Asn Cys Arg Cys Gly Asp
            340                 345                 350

Arg Leu Lys Thr Leu Glu Gln Arg Ala Arg Lys Gln His Gln Arg Cys
        355                 360                 365

Leu Ala His Ser Leu Val Gly Thr Pro Asn Tyr Ile Ala Pro Glu Val
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Leu Leu Arg Lys Gly Tyr Thr Gln Leu Cys Asp Trp Trp Ser Val Gly
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Val Ile Leu Phe Glu Met Leu Val Gly Gln Pro Pro Phe Leu Ala Pro
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Thr Pro Thr Glu Thr Gln Leu Lys Val Ile Asn Trp Glu Asn Thr Leu
            420                 425                 430

His Ile Pro Ala Gln Val Lys Leu Ser Pro Glu Ala Arg Asp Leu Ile
        435                 440                 445

Thr Lys Leu Cys Cys Ser Ala Asp His Arg Leu Gly Arg Asn Gly Ala
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Asp Asp Leu Lys Ala His Pro Phe Phe Ser Ala Ile Asp Phe Ser Ser
465                 470                 475                 480

Asp Ile Arg Lys His Pro Ala Pro Tyr Val Pro Thr Ile Ser His Pro
                485                 490                 495

Met Asp Thr Ser Asn Phe Asp Pro Val Asp Glu Glu Ser Pro Trp Asn
            500                 505                 510

Asp Ala Ser Glu Gly Ser Thr Lys Ala Trp Asp Thr Leu Thr Ser Pro
        515                 520                 525

Asn Asn Lys His Pro Glu His Ala Phe Tyr Glu Phe Thr Phe Arg Arg
    530                 535                 540

Phe Phe Asp Asp Asn Gly Tyr Pro Phe Arg Cys Pro Lys Pro Ser Gly
545                 550                 555                 560

Ala Glu Ala Ser Gln Ala Glu Ser Ser Asp Leu Glu Ser Ser Asp Leu
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Val Asp Gln Thr Glu Gly Cys Gln Pro Val Tyr Val
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